

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 15. (Canceled).

16. (Previously Presented) An optical liquid crystal modulator comprising:

at least one ferroelectric liquid crystal, wherein the at least one ferroelectric liquid crystal has a DHF mode and, at a location of the at least one ferroelectric liquid crystal, exhibits an operating range of an electric field of more than 20 V/ μ m, wherein: at a temperature of about 20.0° C, a helical pitch Po is between about 0.1 to about 0.5 μ m.

17. (Previously Presented) An optical liquid crystal modulator comprising:

at least one ferroelectric liquid crystal, wherein the at least one ferroelectric liquid crystal has a DHF mode and, at a location of the at least one ferroelectric liquid crystal, exhibits an operating range of an electric field of more than 20 V/ μ m, wherein at a temperature of about 20.0° C, a helical pitch Po is about 0.22 μ m.

Claims 18 to 22. (Canceled).

23. (Previously Presented) A method for operating an optical liquid crystal modulator having a ferroelectric liquid crystal, comprising:

operating the optical liquid crystal modulator at a location of the ferroelectric liquid crystal in an operating range of an electric field of greater than 20 V/ μ m,

wherein the ferroelectric liquid crystal has a DHF mode and wherein: the ferroelectric liquid crystal has a helical pitch Po of about 0.1 to 0.5 at a temperature of about 20.0° C.

24. (Previously Presented) A method for operating an optical liquid crystal modulator having a ferroelectric liquid crystal, comprising:

operating the optical liquid crystal modulator at a location of the ferroelectric liquid crystal in an operating range of an electric field of greater than 20 V/ μ m,

wherein the ferroelectric liquid crystal has a DHF mode and wherein the ferroelectric liquid crystal has a helical pitch P_0 of about $0.22 \mu\text{m}$ at a temperature of about 20.0°C .

Claim 25. (Canceled).

Claim 26. (Canceled).